

CALIBRATION SYSTEM WITHOUT USING POTENTIOMETERS

Abstract

A calibration system for use with a radiant heater of an infant apparatus such as an infant warmer or an infant incubator. The system includes an electrical circuit that is used to sense the temperature of the infant by means of a thermistor and to provide a digital signal representative of the temperature. An automatic calibration system avoids the use of potentiometers by inputting two known voltages into the circuit by means of a voltage divider and recording the digital output for each voltage input. The two known voltage inputs and the known digital outputs are used in two equations to solve for the span and offset constants in those equations. Once determined, those constants are used to calibrate the system.